



OAQ Process Information Application
PI-11: FOUNDRY, SMELTING & DIE CAST
OPERATIONS
 State Form 52551 (2-06)
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

IDEM – Office of Air Quality – Permits Branch
 100 N. Senate Avenue, Indianapolis, IN 46204

Telephone: (317) 233-0178 or
 Toll Free: 1-800-451-6027 x30178 (within Indiana)
 Facsimile Number: (317) 232-6749
www.IN.gov/idem/air/permits/index.html

NOTES:

- The purpose of this form is to obtain detailed information about foundry, smelting and die cast operations. Complete one form for each process unit (or group of identical units).
- Detailed **instructions** for this form are available online at www.IN.gov/idem/air/permits/apps/instructions/pi11instructions.html.
- All information submitted to IDEM will be made available to the public unless it is submitted under a claim of confidentiality. Claims of confidentiality must be made at the time the information is submitted to IDEM, and must follow the requirements set out in 326 IAC 17.1-4-1. Failure to follow these requirements exactly will result in your information becoming a public record, available for any one to inspect and photocopy.

PART A: Foundry, Smelting & Die Cast Processes

Part A identifies processes that are related foundries, smelting, and die casting and additional forms that may be needed.

1. Process	Use the form listed for the specified processes. Check all that apply.
a. Raw Material Storage and Handling	This form is included for raw materials unloading / storage: <input type="checkbox"/> PI-03 <input type="checkbox"/> N/A
b. Non-Metallic Mineral Processing (<i>crushing and sizing of raw materials</i>)	This form is included for the raw materials processing: <input type="checkbox"/> PI-18 <input type="checkbox"/> N/A
c. Ground Material Storage and Handling	This form is included for the raw mills storage / handling: <input type="checkbox"/> PI-03 <input type="checkbox"/> N/A
d. Pre-heater / Pre-calciner	This form is included for the pre-heater: <input type="checkbox"/> PI-02 <input type="checkbox"/> N/A
e. Fuel Type for pre-heater / pre-calciner (<i>If other than Natural Gas</i>)	Submit form if fuel other than Natural Gas used in the preheater: <input type="checkbox"/> PI-02F <input type="checkbox"/> N/A
f. Furnace	These forms are included for the furnace: <input type="checkbox"/> PI-02A <input type="checkbox"/> N/A <input type="checkbox"/> PI-02B <input type="checkbox"/> N/A <input type="checkbox"/> PI-02G <input type="checkbox"/> N/A <input type="checkbox"/> PI-02H <input type="checkbox"/> N/A
g. Fuel Type for Kiln (<i>If other than Natural Gas</i>)	Submit form if fuel other than Natural Gas used in the kiln: <input type="checkbox"/> PI-02F <input type="checkbox"/> N/A
h. Non-Metallic Mineral Processing (<i>crushing and sizing of clinker</i>)	This form is included for processing: <input type="checkbox"/> PI-18 <input type="checkbox"/> N/A
i. Shot Blasting	This form is included for shot blasting: <input type="checkbox"/> PI-23 <input type="checkbox"/> N/A
j. Grinding	This form is included for grinding: <input type="checkbox"/> PI-18 <input type="checkbox"/> N/A
k. Painting	This form is included for painting: <input type="checkbox"/> PI-19 <input type="checkbox"/> N/A
l. Sand Reclamation	This form is included for the incineration process: <input type="checkbox"/> PI-02 <input type="checkbox"/> N/A <i>If the sand reclamation is not an incineration process, explain the process:</i>
m. Other process(es)	This form is included for (<i>specify process</i>): <input type="checkbox"/> <input type="checkbox"/> N/A

PART B: Operation Details

Part B identifies the overall foundry process.

2. Final Products: (check all that apply)
☐ Billets ☐ Bars ☐ Castings ☐ Ingots ☐ Molten Metal
☐ Other (specify)

3. Type of Process: Check all that apply.

☐ Foundry: ☐ Aluminum ☐ Brass ☐ Copper ☐ Ductile Iron
☐ Gray Iron ☐ Steel ☐ Other (specify)

☐ Smelting: ☐ Aluminum ☐ Lead ☐ Other (specify)

☐ Aluminum Die Casting

PART C – Charge Handling Process

Part B identifies the components associated with the charge handling process. Use additional forms as necessary.

4. Unit ID	5. Installation Date	6. Material Handled	7. Maximum Charge Rate (tons/hr)	8. Is the Process Totally Enclosed in a Building?
				<input type="checkbox"/> Yes <input type="checkbox"/> No
				<input type="checkbox"/> Yes <input type="checkbox"/> No
				<input type="checkbox"/> Yes <input type="checkbox"/> No
				<input type="checkbox"/> Yes <input type="checkbox"/> No
				<input type="checkbox"/> Yes <input type="checkbox"/> No

This following section identifies all emission factors used to calculate air emissions from sand handling.

9. Air Pollutant:	10. Emission Factor		11. Source of Emission Factor (If not using AP-42, include calculations)		
	value	units			
Particulate Matter (PM)			<input type="checkbox"/> AP-42	<input type="checkbox"/> Other	<input type="checkbox"/> N/A
Particulate Matter less than 10µm (PM ₁₀)			<input type="checkbox"/> AP-42	<input type="checkbox"/> Other	<input type="checkbox"/> N/A
Particulate Matter less than 2.5µm (PM _{2.5})			<input type="checkbox"/> AP-42	<input type="checkbox"/> Other	<input type="checkbox"/> N/A
Other (specify):			<input type="checkbox"/> AP-42	<input type="checkbox"/> Other	<input type="checkbox"/> N/A

12. Add-On Control Technology: Identify all control technologies used for this unit, and attach completed CE-01 (unless "none").

- ☐ None
☐ Baghouse / Fabric Filter – Attach CE-02.
☐ Electrostatic Precipitator – Attach CE-04.
☐ Reduction – Attach CE-09
☐ Cyclone – Attach CE-03.
☐ Absorption / Wet Collector / Scrubber – Attach CE-05.
☐ Other (specify): – Attach CE-10.

13. Control Techniques: Identify all control techniques used for this unit.

14. Process Limitations / Additional Information: Identify any acceptable process limitations. Attach additional information if necessary.

PART D – Sand Handling Information

Part D identifies all the components associated with the sand handling. Use additional forms as necessary.

15. Does your process include sand handling?		<input type="checkbox"/> Yes <i>If yes, complete the rest of this section.</i>
		<input type="checkbox"/> No <i>If no, proceed to the next section.</i>
16. Unit ID	17. Installation Date	18. Sand Throughput Rate (tons of sand per hour)

This following section identifies all emission factors used to calculate air emissions from sand handling.

19. Air Pollutant:	20. Emission Factor		21. Source of Emission Factor (If not using AP-42, include calculations)
	value	units	
Particulate Matter (PM)			<input type="checkbox"/> AP-42 <input type="checkbox"/> Other <input type="checkbox"/> N/A
Particulate Matter less than 10µm (PM ₁₀)			<input type="checkbox"/> AP-42 <input type="checkbox"/> Other <input type="checkbox"/> N/A
Particulate Matter less than 2.5µm (PM _{2.5})			<input type="checkbox"/> AP-42 <input type="checkbox"/> Other <input type="checkbox"/> N/A
Other (specify):			<input type="checkbox"/> AP-42 <input type="checkbox"/> Other <input type="checkbox"/> N/A

22. Add-On Control Technology: Identify all control technologies used for this unit, and attach completed CE-01 (unless "none").

- | | |
|---|--|
| <input type="checkbox"/> None | <input type="checkbox"/> Cyclone – Attach CE-03. |
| <input type="checkbox"/> Baghouse / Fabric Filter – Attach CE-02. | <input type="checkbox"/> Absorption / Wet Collector / Scrubber – Attach CE-05. |
| <input type="checkbox"/> Electrostatic Precipitator – Attach CE-04. | <input type="checkbox"/> Other (specify): _____ – Attach CE-10. |
| <input type="checkbox"/> Reduction – Attach CE-09 | |

23. Control Techniques: Identify all control techniques used for this unit.

24. Process Limitations / Additional Information: Identify any acceptable process limitations. Attach additional information if necessary.

This space is intentionally left blank.

PART E – Mold Making Process Information

Part E identifies all process components associated with Mold Making. Use additional sheets as necessary.

25. Does your production process include a process for making sand molds? ☐ Yes *If yes, complete the rest of this section.*
☐ No *If no, proceed to the next section.*

26. Number of Mold Making Process Lines:

27. Unit ID	28. Installation Date	29. Mixer capacity (tons sand per hr)	30. Type of Binder (for mold making)	31. Amount of binder used (lb of binder per lb of sand)	32. % VOC in binder (include MSDS)

This following section identifies all emission factors used to calculate air emissions from the Mold Mixer.

33. Air Pollutant:	34. Emission Factor		35. Source of Emission Factor (If not using AP-42, include calculations)
	value	units	
Carbon Monoxide (CO)			<input type="checkbox"/> AP-42 <input type="checkbox"/> Other <input type="checkbox"/> N/A
Lead (Pb)			<input type="checkbox"/> AP-42 <input type="checkbox"/> Other <input type="checkbox"/> N/A
Nitrogen Oxides (NO _x)			<input type="checkbox"/> AP-42 <input type="checkbox"/> Other <input type="checkbox"/> N/A
Particulate Matter (PM)			<input type="checkbox"/> AP-42 <input type="checkbox"/> Other <input type="checkbox"/> N/A
Particulate Matter less than 10µm (PM ₁₀)			<input type="checkbox"/> AP-42 <input type="checkbox"/> Other <input type="checkbox"/> N/A
Particulate Matter less than 2.5µm (PM _{2.5})			<input type="checkbox"/> AP-42 <input type="checkbox"/> Other <input type="checkbox"/> N/A
Sulfur Dioxide (SO ₂)			<input type="checkbox"/> AP-42 <input type="checkbox"/> Other <input type="checkbox"/> N/A
Volatile Organic Compounds (VOC)			<input type="checkbox"/> AP-42 <input type="checkbox"/> Other <input type="checkbox"/> N/A
Hazardous Air Pollutants (HAP) (specify):			<input type="checkbox"/> AP-42 <input type="checkbox"/> Other <input type="checkbox"/> N/A
Other (specify):			<input type="checkbox"/> AP-42 <input type="checkbox"/> Other <input type="checkbox"/> N/A

36. Add-On Control Technology: *Identify all control technologies used for this unit, and attach completed CE-01 (unless "none").*

- | | |
|---|--|
| <input type="checkbox"/> None | <input type="checkbox"/> Cyclone – Attach CE-03. |
| <input type="checkbox"/> Baghouse / Fabric Filter – Attach CE-02. | <input type="checkbox"/> Absorption / Wet Collector / Scrubber – Attach CE-05. |
| <input type="checkbox"/> Electrostatic Precipitator – Attach CE-04. | <input type="checkbox"/> Adsorber – Attach CE-07. |
| <input type="checkbox"/> Oxidizer / Incinerator – Attach CE-06. | <input type="checkbox"/> Reduction – Attach CE-09. |
| <input type="checkbox"/> Condenser – Attach CE-08. | |
| <input type="checkbox"/> Other (specify): | – Attach CE-10. |

37. Control Techniques: *Identify all control techniques used for this unit.*

38. Process Limitations / Additional Information: *Identify any acceptable process limitations. Attach additional information if necessary.*

PART F – Core Mixing Process Information

Part F identifies the process components associated with Core Mixing. Use additional sheets as necessary.

- 39. Does your production process include a core-mixing process?** ☐ Yes *If yes, complete the rest of this section.*
☐ No *If no, proceed to the next section.*

40. Number of Core Mixing Process Lines:

41. Core Mixer Unit ID	42. Installation Date	43. Core Mixer Capacity (tons sand per hour)	44. Type of Binder (for core making)	45. Amount of Binder Used (lb of binder per lb of sand)	46. % VOC in Binder (include MSDS)

This following section identifies all emission factors used to calculate air emissions from the Core Mixer unit.

47. Air Pollutant:	48. Emission Factor		49. Source of Emission Factor (If not using AP-42, include calculations)		
	value	units			
Carbon Monoxide (CO)			<input type="checkbox"/> AP-42	<input type="checkbox"/> Other	<input type="checkbox"/> N/A
Lead (Pb)			<input type="checkbox"/> AP-42	<input type="checkbox"/> Other	<input type="checkbox"/> N/A
Nitrogen Oxides (NO _x)			<input type="checkbox"/> AP-42	<input type="checkbox"/> Other	<input type="checkbox"/> N/A
Particulate Matter (PM)			<input type="checkbox"/> AP-42	<input type="checkbox"/> Other	<input type="checkbox"/> N/A
Particulate Matter less than 10µm (PM ₁₀)			<input type="checkbox"/> AP-42	<input type="checkbox"/> Other	<input type="checkbox"/> N/A
Particulate Matter less than 2.5µm (PM _{2.5})			<input type="checkbox"/> AP-42	<input type="checkbox"/> Other	<input type="checkbox"/> N/A
Sulfur Dioxide (SO ₂)			<input type="checkbox"/> AP-42	<input type="checkbox"/> Other	<input type="checkbox"/> N/A
Volatile Organic Compounds (VOC)			<input type="checkbox"/> AP-42	<input type="checkbox"/> Other	<input type="checkbox"/> N/A
Worst Case HAP (specify):			<input type="checkbox"/> AP-42	<input type="checkbox"/> Other	<input type="checkbox"/> N/A
Other (specify):			<input type="checkbox"/> AP-42	<input type="checkbox"/> Other	<input type="checkbox"/> N/A

50. Add-On Control Technology: *Identify all control technologies used for this unit, and attach completed CE-01 (unless "none").*

- | | |
|---|--|
| <input type="checkbox"/> None | <input type="checkbox"/> Cyclone – Attach CE-03. |
| <input type="checkbox"/> Baghouse / Fabric Filter – Attach CE-02. | <input type="checkbox"/> Absorption / Wet Collector / Scrubber – Attach CE-05. |
| <input type="checkbox"/> Electrostatic Precipitator – Attach CE-04. | <input type="checkbox"/> Adsorber – Attach CE-07. |
| <input type="checkbox"/> Oxidizer / Incinerator – Attach CE-06. | <input type="checkbox"/> Reduction – Attach CE-09. |
| <input type="checkbox"/> Condenser – Attach CE-08. | |
| <input type="checkbox"/> Other (specify): | – Attach CE-10. |

51. Control Techniques: *Identify all control techniques used for this unit.*

52. Process Limitations / Additional Information: *Identify any acceptable process limitations. Attach additional information if necessary.*

PART G – Core Mixing Process Information

Part G identifies the process components associated with the Core Machine. Use additional sheets as necessary.

53. Does your production process include a core-making process?

☐ Yes *If yes, complete the rest of this section.*

☐ No *If no, proceed to the next section.*

54. Core Machine Unit ID	55. Installation Date	56. Type of Core Making Process	57. Core Making Capacity (tons of cores per hour)	58. Type of Catalyst (for core making)	59. Amount of Catalyst Used (lb of catalyst per lb of sand)	60. % VOC in Catalyst (include MSDS)

This following section identifies all emission factors used to calculate air emissions from the Core Machine.

61. Air Pollutant:	62. Emission Factor		63. Source of Emission Factor (If not using AP-42, include calculations)
	value	units	
Carbon Monoxide (CO)			<input type="checkbox"/> AP-42 <input type="checkbox"/> Other <input type="checkbox"/> N/A
Lead (Pb)			<input type="checkbox"/> AP-42 <input type="checkbox"/> Other <input type="checkbox"/> N/A
Nitrogen Oxides (NO _x)			<input type="checkbox"/> AP-42 <input type="checkbox"/> Other <input type="checkbox"/> N/A
Particulate Matter (PM)			<input type="checkbox"/> AP-42 <input type="checkbox"/> Other <input type="checkbox"/> N/A
Particulate Matter less than 10µm (PM ₁₀)			<input type="checkbox"/> AP-42 <input type="checkbox"/> Other <input type="checkbox"/> N/A
Particulate Matter less than 2.5µm (PM _{2.5})			<input type="checkbox"/> AP-42 <input type="checkbox"/> Other <input type="checkbox"/> N/A
Sulfur Dioxide (SO ₂)			<input type="checkbox"/> AP-42 <input type="checkbox"/> Other <input type="checkbox"/> N/A
Volatile Organic Compounds (VOC)			<input type="checkbox"/> AP-42 <input type="checkbox"/> Other <input type="checkbox"/> N/A
Worst Case HAP <i>(specify)</i> :			<input type="checkbox"/> AP-42 <input type="checkbox"/> Other <input type="checkbox"/> N/A
Other <i>(specify)</i> :			<input type="checkbox"/> AP-42 <input type="checkbox"/> Other <input type="checkbox"/> N/A

64. Add-On Control Technology: *Identify all control technologies used for this unit, and attach completed CE-01 (unless "none").*

- | | |
|---|--|
| <input type="checkbox"/> None | <input type="checkbox"/> Cyclone – Attach CE-03. |
| <input type="checkbox"/> Baghouse / Fabric Filter – Attach CE-02. | <input type="checkbox"/> Absorption / Wet Collector / Scrubber – Attach CE-05. |
| <input type="checkbox"/> Electrostatic Precipitator – Attach CE-04. | <input type="checkbox"/> Adsorber – Attach CE-07. |
| <input type="checkbox"/> Oxidizer / Incinerator – Attach CE-06. | <input type="checkbox"/> Reduction – Attach CE-09. |
| <input type="checkbox"/> Condenser – Attach CE-08. | |
| <input type="checkbox"/> Other <i>(specify)</i> : | – Attach CE-10. |

65. Control Techniques: *Identify all control techniques used for this unit.*

66. Process Limitations / Additional Information: *Identify any acceptable process limitations. Attach additional information if necessary.*

PART H – Core Dip Tank Information

Part H identifies the process components associated with the Core Dip Tank. Use additional sheets as necessary.

67. Does your production process include a core-dip tank?

☐ Yes *If yes, complete the rest of this section.*

☐ No *If no, proceed to the next section.*

68. Dip Tank Unit ID	69. Installation Date	70. Dip Tank Capacity <i>(specify units)</i>	71. Amount of Core Wash Used <i>(lb of core wash per lb of sand)</i>	72. % VOC in Core Wash <i>(include MSDS)</i>	73. Core Oven ID <i>(use Form PI-02 to describe this unit)</i>

This following section identifies all emission factors used to calculate air emissions from the Core Dip Tank.

74. Air Pollutant:	75. Emission Factor		76. Source of Emission Factor (If not using AP-42, include calculations)		
	value	units			
Carbon Monoxide (CO)			<input type="checkbox"/> AP-42	<input type="checkbox"/> Other	<input type="checkbox"/> N/A
Lead (Pb)			<input type="checkbox"/> AP-42	<input type="checkbox"/> Other	<input type="checkbox"/> N/A
Nitrogen Oxides (NO _x)			<input type="checkbox"/> AP-42	<input type="checkbox"/> Other	<input type="checkbox"/> N/A
Particulate Matter (PM)			<input type="checkbox"/> AP-42	<input type="checkbox"/> Other	<input type="checkbox"/> N/A
Particulate Matter less than 10µm (PM ₁₀)			<input type="checkbox"/> AP-42	<input type="checkbox"/> Other	<input type="checkbox"/> N/A
Particulate Matter less than 2.5µm (PM _{2.5})			<input type="checkbox"/> AP-42	<input type="checkbox"/> Other	<input type="checkbox"/> N/A
Sulfur Dioxide (SO ₂)			<input type="checkbox"/> AP-42	<input type="checkbox"/> Other	<input type="checkbox"/> N/A
Volatile Organic Compounds (VOC)			<input type="checkbox"/> AP-42	<input type="checkbox"/> Other	<input type="checkbox"/> N/A
Worst Case HAP <i>(specify)</i> :			<input type="checkbox"/> AP-42	<input type="checkbox"/> Other	<input type="checkbox"/> N/A
Other <i>(specify)</i> :			<input type="checkbox"/> AP-42	<input type="checkbox"/> Other	<input type="checkbox"/> N/A

77. Add-On Control Technology: *Identify all control technologies used for this unit, and attach completed CE-01 (unless “none”).*

- ☐ None

☐ Baghouse / Fabric Filter – *Attach CE-02.*

☐ Electrostatic Precipitator – *Attach CE-04.*

☐ Oxidizer / Incinerator – *Attach CE-06.*

☐ Condenser – *Attach CE-08.*

☐ Other (*specify*):

☐ Cyclone – *Attach CE-03.*

☐ Absorption / Wet Collector / Scrubber – *Attach CE-05.*

☐ Adsorber – *Attach CE-07.*

☐ Reduction – *Attach CE-09.*

☐ – *Attach CE-10.*

78. Control Techniques: *Identify all control techniques used for this unit.*

79. Process Limitations / Additional Information: *Identify any acceptable process limitations. Attach additional information if necessary.*

PART I – Refining, Inoculation & Magnesium Treatment & Alloying Information

Part I identifies any additives to the process to change the properties of the metals. Use additional sheets as necessary.

80. Does your production process use a REFINING procedure?

☐ Yes If yes, provide the information about flux.

☐ No If no, proceed to the section about inoculation.

81. Flux type

82. Flux amount
(lb flux per lb metal)

83. Frequency of process
(% of time refining is used)

84. Does your production process use an INOCULATION procedure?

☐ Yes If yes, provide the information about the inoculants.

☐ No If no, proceed to the section about magnesium treatment.

85. Inoculant type

86. Inoculant amount
(lb inoculant per lb metal)

87. Frequency of process
(% of time inoculant is used)

88. Does your production process use a MAGNESIUM (Mg) TREATMENT procedure?

☐ Yes If yes, provide the information about magnesium treatment.

☐ No If no, proceed to the section about Dross Cooling.

89. Location of Magnesium Treatment Process

☐ Furnace ☐ Other (specify):

90. Unit Where Magnesium Process Occurs

91. Unit ID

92. Installation Date

93. Magnesium amount
(lb Mg per lb metal)

94. Does your production process use DROSS COOLING?

☐ Yes If yes, complete the rest of this section.

☐ No If no, proceed to the next section.

95. Type of Dross Cooling:

96. Dross usage
(tons dross/hr)

97. Unit ID

98. Installation Date

99. Number of Coolers / Vats

100. Volume of each Cooler / Vat

- ☐ Dross Coolers
☐ Open Vats
☐ Dross Coolers
☐ Open Vats
☐ Dross Coolers
☐ Open Vats
☐ Dross Coolers
☐ Open Vats

PART J – Pouring, Casting, Cooling and Shakeout Details

Part J identifies the Pouring, Casting, Casting, Cooling, and Shakeout process lines. Use additional sheets as necessary.

101. Line / Unit ID	102. Installation Date	103. Capacity		104. VOC emitted (lb per hour, lb per cast)	105. PM emitted (lb per hour, lb per cast)	106. HAP emitted (lb per hour, lb per cast)
		(tons of metal per hr)	(tons of sand per hour)			

107. Air Pollutant:	108. Emission Factor		109. Source of Emission Factor (If not using AP-42, include calculations)		
	value	units			
Carbon Monoxide (CO)			<input type="checkbox"/> AP-42	<input type="checkbox"/> Other	<input type="checkbox"/> N/A
Lead (Pb)			<input type="checkbox"/> AP-42	<input type="checkbox"/> Other	<input type="checkbox"/> N/A
Nitrogen Oxides (NO _x)			<input type="checkbox"/> AP-42	<input type="checkbox"/> Other	<input type="checkbox"/> N/A
Particulate Matter (PM)			<input type="checkbox"/> AP-42	<input type="checkbox"/> Other	<input type="checkbox"/> N/A
Particulate Matter less than 10µm (PM ₁₀)			<input type="checkbox"/> AP-42	<input type="checkbox"/> Other	<input type="checkbox"/> N/A
Particulate Matter less than 2.5µm (PM _{2.5})			<input type="checkbox"/> AP-42	<input type="checkbox"/> Other	<input type="checkbox"/> N/A
Sulfur Dioxide (SO ₂)			<input type="checkbox"/> AP-42	<input type="checkbox"/> Other	<input type="checkbox"/> N/A
Volatile Organic Compounds (VOC)			<input type="checkbox"/> AP-42	<input type="checkbox"/> Other	<input type="checkbox"/> N/A
Worst Case HAP (specify):			<input type="checkbox"/> AP-42	<input type="checkbox"/> Other	<input type="checkbox"/> N/A
Other (specify):			<input type="checkbox"/> AP-42	<input type="checkbox"/> Other	<input type="checkbox"/> N/A

110. Add-On Control Technology: Identify all control technologies used for this unit, and attach completed CE-01 (unless "none").

- | | |
|---|--|
| <input type="checkbox"/> None | |
| <input type="checkbox"/> Baghouse / Fabric Filter – Attach CE-02. | <input type="checkbox"/> Cyclone – Attach CE-03. |
| <input type="checkbox"/> Electrostatic Precipitator – Attach CE-04. | <input type="checkbox"/> Absorption / Wet Collector / Scrubber – Attach CE-05. |
| <input type="checkbox"/> Oxidizer / Incinerator – Attach CE-06. | <input type="checkbox"/> Adsorber – Attach CE-07. |
| <input type="checkbox"/> Condenser – Attach CE-08. | <input type="checkbox"/> Reduction – Attach CE-09. |
| <input type="checkbox"/> Other (specify): | – Attach CE-10. |

111. Control Techniques: Identify all control techniques used for this unit.

112. Process Limitations / Additional Information: Identify any acceptable process limitations. Attach additional information if necessary.

PART K: Federal Rule Applicability

Part K identifies any federal rules that apply to the process.

113. Is a New Source Performance Standard (NSPS) applicable to this source? <i>If yes, identify the affected emission units and attach a completed FED-01 for each rule that applies.</i>	<input type="checkbox"/> Yes <input type="checkbox"/> No	114. Unit ID
<input type="checkbox"/> 40 CFR Part 60, Subpart L	Secondary Lead Smelters	
<input type="checkbox"/> 40 CFR Part 60, Subpart M	Brass and Bronze Production Plants	
<input type="checkbox"/> 40 CFR Part 60, Subpart LL	Metallic Mineral Processing Plants	
<input type="checkbox"/> 40 CFR Part 60, Subpart OOO	Non-Metallic Mineral Processing Plants	
<input type="checkbox"/> 40 CFR Part 60, Subpart UUU	Calciners and Dryers in Mineral Industries	
115. Is a National Emission Standard for Hazardous Air Pollutants (NESHAP) applicable to this source? <i>If yes, identify the affected emission units and attach a completed FED-01 for each rule that applies.</i>	<input type="checkbox"/> Yes <input type="checkbox"/> No	116. Unit ID
<input type="checkbox"/> 40 CFR Part 63, Subpart EEEE	Iron and Steel Foundries	
<input type="checkbox"/> 40 CFR Part 63, Subpart MMMM	Miscellaneous Metal Parts and Products	
<input type="checkbox"/> 40 CFR Part 63, Subpart RRR	Secondary Aluminum	
<input type="checkbox"/> 40 CFR Part 63, Subpart X	Secondary Lead Smelter	
117. Non-Applicability Determination: Provide an explanation If the process unit appears subject to a rule (based on the rule title or the source category), but the rule will not apply.		